

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number  
WO 2005/074455 A3

## (51) International Patent Classification:

A61M 11/00 (2006.01) A61M 15/00 (2006.01)  
A61B 5/08 (2006.01) A61M 16/00 (2006.01)  
A61B 7/00 (2006.01) G01F 1/00 (2006.01)

## (21) International Application Number:

PCT/US2004/040296

## (22) International Filing Date:

3 December 2004 (03.12.2004)

## (25) Filing Language:

English

## (26) Publication Language:

English

## (30) Priority Data:

10/763,040 21 January 2004 (21.01.2004) US

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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AF, AG, AI, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

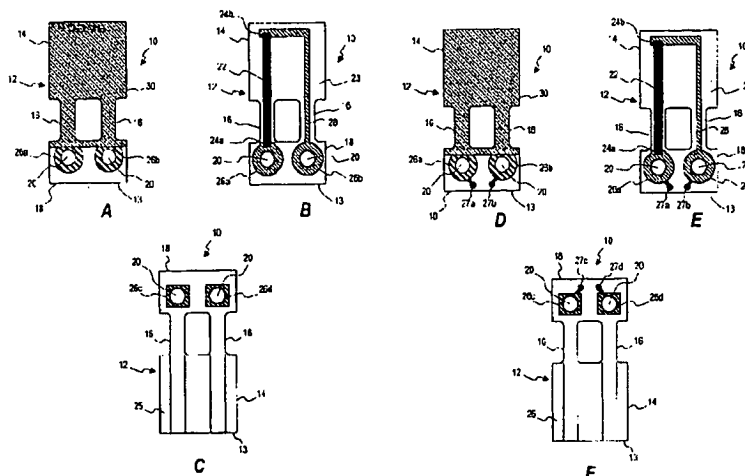
— with international search report  
— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

## (88) Date of publication of the international search report:

22 June 2006

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

## (54) Title: SENSOR FOR DETECTING AIR FLOW



(57) Abstract: An air flow sensor comprises a flexible resistive element permanently affixed to a flexible substrate. The air flow sensor is positioned in an inlet for airway to insure the inlet is cover at all times other than during the inhalation. When a vacuum is applied to the airway, a resulting drop in air pressure within the airway causes air to flow through the inlet and airway, causing the sensor's substrate to flex. Flexure of the substrate also causes a resistive element to flex, resulting in a change in the electrical resistance of the resistive element, such as an increase in resistance. Flexure of the sensor is enhanced by flexible leads, which serve as a hinge point. An air shield may be positioned around the periphery of the air flow sensor to channel and restrict the movement of air flowing through the air inlet, thereby enhancing movement of the sensor.

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European Patent  
Office

**SUPPLEMENTARY  
EUROPEAN SEARCH REPORT**

Application Number  
EP 04 81 2741

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 97/05824 A (RESMED LTD [AU]; BRYDON JOHN WILLIAM ERNEST [AU]; CAPPUS HANS JOACHIM) 20 February 1997 (1997-02-20) * page 4, line 22 - page 5, line 9 * * page 8, line 9 - page 12, line 18 * * page 13, line 12 - page 15, line 2; figures 9-12,16,17 *	1-3,5,8,9,12,13	INV. A61M11/00 A61M15/00 A61B5/08 A61M16/00 A61B7/00 G01F1/00
Y	-----	11	
Y	US 4 729 244 A (FURUSE AKIO [JP]) 8 March 1988 (1988-03-08) * column 3, line 10 - line 31; figure 1 *	11	
X	US 2002/174724 A1 (BENZEL HUBERT [DE] ET AL) 28 November 2002 (2002-11-28) * page 2, left hand column, paragraph 3 - paragraph 7; page 2, right hand column, last paragraph - page 3, left hand column, paragraph 3; figures 1,5,7 *	1,3	
			TECHNICAL FIELDS SEARCHED (IPC)
			G01F
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search		Date of completion of the search	Examiner
The Hague		20 September 2007	Heinsius, Robert
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	